

ABSTRACT OF THE DISCLOSURE

An image processing apparatus has interpolation calculation means which outputs, based on an input image signal P7, a binary signal P8=0 or 1 by calculating a formula, $P8=S[i](x_l, y_l) \text{ EXOR } (DF(x_l, y_l) \text{ AND } IP(x_l, y_l))$, using a screen pattern $S[i](x_l, y_l)$, a difference pattern $DF(x_{la}, y_{la})$ based on screen patterns $S[i]$ and $S[i+1]$, and an interpolation pattern $IP(x_{la}, y_{la})$.